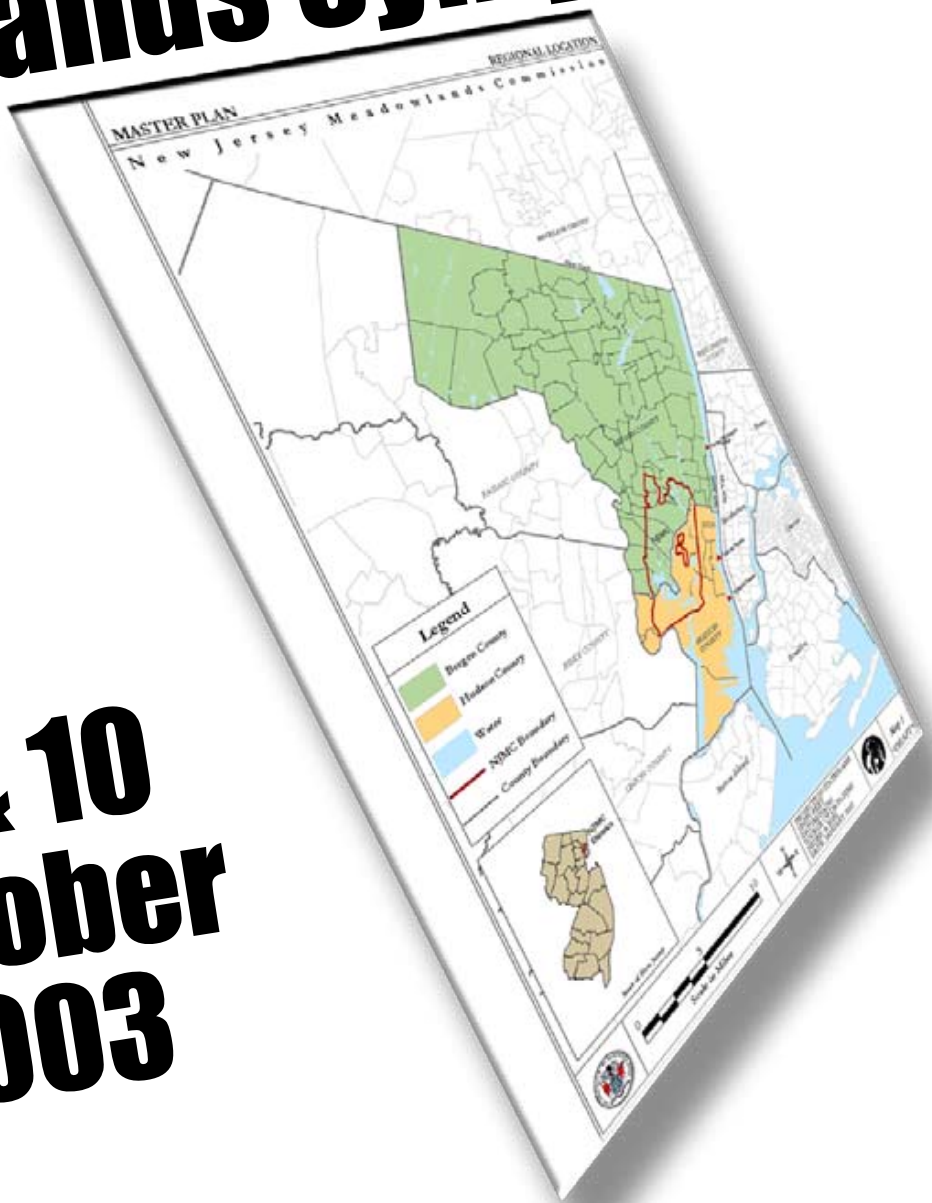


# The Meadowlands Symposium

A Scientific  
Symposium  
On The  
Hackensack  
Meadowlands

9 & 10  
October  
2003

At The  
New Jersey  
Meadowlands  
Commission  
Environment Center  
1 DeKorte Park Plaza  
Lyndhurst, New Jersey



Hudsonia



US Army Corps  
of Engineers®

**Thursday, October 9**

**Remarks by elected officials [invited]: Governor James McGreevey; U.S. Senator Jon Corzine; U.S. Senator Frank Lautenberg; Steven Rothman, Member U.S. Congress (NJ9th); Commissioner Bradley Campbell, NJDEP**

**Keynote Speech: William Mitsch "Urban Wetlands and Large-Scale Wetland Restoration: Lessons Learned"**

**Hors d'oeuvres and Poster Presentation Session**

**Oral Presentations**

Biodiversity Patterns in the Hackensack Meadowlands  
E. Kiviat, K. MacDonald

Estuarine Shifts in Organic Matter and Plant Communities in the Meadowlands and Lower Hudson Bay—European Impact  
D.M. Peteet, D. Pederson, D. Kleinstein

Community Involvement in Toxic Crab Outreach: A Case Study in the Issuance of Fish Consumption Advisories  
K. Pflugh

The Use of Paleoecological Approaches in Modern Wetland Reconstruction/Mitigation Efforts  
B. LePage

The Meadowlands Before the Commission: Three Centuries of Human Use and Modification of the Hackensack Meadowlands  
S. Marshall

The Influence of the Hackensack Meadowlands on the Tidal Hydraulics of the Hackensack River  
R. Miskewitz, R. Hires

Mercury in the Hackensack River: Initial Findings of the NJ Toxics Reduction Workplan for the NY-NJ Harbor  
J. Pecchioli

Sediment, Carbon, and Trace Contaminant Contributions to the New Jersey Meadowlands Area from the Hackensack River Basin  
T. Wilson

Historical and Current Ecology of the Lower Passaic River, New Jersey  
T. Ianuzzi, D. Ludwig

Hydrogeomorphic (HGM) Functional Assessment Model and Guidebook for Tidal Fringe Wetlands in the New Jersey Meadowlands  
P. McBrien

The Plan to Restore the Meadowlands to Health (Not Youth)  
M. Renna

Tidal Marsh Restoration in Areas with Contaminated or Unconsolidated Soils  
T.Doss

**Friday, October 10**

**Field Trips (by boat or bus) of Meadowlands Restoration Sites**

**Oral Presentations**

Vigor Gradients of *Phragmites australis* in the Meadowlands District  
F. Artigas, A. Aydiner

Tidal Variability in an Urbanized Estuary  
J. DiLorenzo, R. Filadelfo, T. Najarian, V. Gunawardana, C. Surak

Historic GIS and Terrain Modeling  
J. Grossman

Comparison of Sediment and Detritus Toxicity from a Heavy Metal Contaminated Freshwater Marsh  
C. Bentivegna, S. Bugel, J. Alfano, K. Czechowicz

Benthic Communities and Metal Contamination in Eight Day Swamp, a Brackish Marsh in the Hackensack Meadowlands of New Jersey  
J. Weis, P. Weis

Turning the Tide in the Meadowlands—How Science Effects Change  
B. Sheehan, L. Kelly

Benthic Communities in *Spartina alterniflora* and *Phragmites australis* Dominated Salt Marshes Found in the Hackensack Meadowlands  
C. Yuhas

Mercury Contamination in Berrys Creek and Downstream Ecosystem  
J. Schaefer, T. Cardona-Merek, K. Ellickson, J. Yagi, T. Barkay, J. Reinfelder

Atmospheric Deposition of Organic and Inorganic Contaminants to the New Jersey Meadowlands  
L. Totten, R. Reinfelder, C. Gigliotti, D. Van Ry, J. Dachs, J. Girona, J. Offenberg, Y. Koelliker, M. Panangadan, S. Yan, Y. Zhuang, S. Goodrow, K. Ellickson, R. Gioia, S. Eisenreich

Distribution of Contaminants in the NY-NJ Harbor Area  
H. Feng

**Organizing Committee**

Francisco Artigas  
Kirk Barrett (chair)  
James Cramer  
Leonard Houston  
Erik Kiviat

**Advisory Committee**

Brett Bragin  
Anthony Decandia  
Terry Doss  
Milton Halem  
Stephen Handel  
Thomas Marturano  
Marc Matsil  
Marion McLary  
Mary Anne Thiesing

## Poster Presentations

Chemical and Biotic Assessment of a Degraded Brackish Marsh in the Hackensack Meadowlands K. Barrett, M. McBrien, F. Artigas

Fisheries Resource Inventory of the Hackensack River B. Bragin, J. Misuik, C. Woolcott

Evaluating Macroinvertebrate Biodiversity in a New Jersey Freshwater Marsh S. Bugel, C. Bentivegna

An Evaluation of the Effectiveness of Continuous Growing Season Grazing by Goats as a Means to Control *Phragmites australis* in a Tidal Marsh R. Clanton B. Evans, K. Strait

Distribution of Metals, PCBs and PCDD/Fs K. Dimou, T. Su, G. Korfiatis, R. Hires

Seed Dispersal Dynamics in a Restored Salt Marsh: Implications for Restoration Success P. Hicks, J. Hartman

Mineral-Trace Metals Associations (Speciation) in Contaminated Sediments from the Hackensack Meadowlands Urban Estuary V. Hover

Environmental Factors Limiting Northern Harrier (*Circus cyaneus*) Populations in the New Jersey Meadowlands M. Laska, J. Baxter, A. Graves

The Feasibility of Marsh Restoration and Connectivity in the New Jersey Hackensack Meadowlands L. Windham, M. Laska

The Use of Paleoecological Approaches in Modern Wetland Reconstruction/Mitigation Efforts B. LePage

Approaches to the Concept of Biocomplexity: Application to Protistan Data from the Meadowlands M. Levandosky

Assessing and Monitoring Groundwater Contamination from Landfill Leachate in Kearny Marsh Using High-Resolution Geophysics N. Mansoor, L. Slater

*Spartina alterniflora* and *Phragmites australis* as Habitat for the Ribbed Mussel (*Geukensia demissa*) (Dillwyn) M. McClary

Water Quality Assessment of Point and Non-Point Discharges on the Hackensack River Estuary T. Najarian, J. Sheehan, V. Gunawardana, P. Huang, H. Litwack

Mercury in the Hackensack River: Initial Findings of the NJ Toxics Reduction Workplan for NY-NJ Harbor J. Pecchioli, G. Buchanan, R. Miskewitz

The Distribution, Abundance, and Potential Prey of a Marsh Resident Fish: *Phragmites* versus *Spartina alterniflora* D. Raichel

Comparing Microbial Biocomplexity in Adjacent Salt Marsh Microhabitats in Winter and Summer: 3 Approaches B. Ravit, J. Champanerkar, O. Anderson, D. Blackmore, M. Haggbloom, L. Kerkhof, T. Gorrell, G. Benoit, M. Levandosky

Tetrabromobisphenol-A (TBBPA) Biotransformation in Vegetated and Non-Vegetated Salt Marsh Sediments B. Ravit, M. Haggbloom, J. Ehrenfeld

Behavioral Differences Between Juvenile Blue Crabs (*Callinectes sapidus*) from the Hackensack Meadowlands and a Reference Site in Tuckerton, NJ J. Reichmuth, J. MacDonald, J. Mairo, T. Glover, J. Weis

Analyzing Groundwater Flow to Aid in Wetland Mitigation R. Riberty, D. Ophori

An Analysis of Epifaunal Communities Associated with the Stems of *Phragmites australis* and *Spartina alterniflora* Collected from Brackish Marshes in New Jersey T. Robertson, J. Weis

Effective Avian Monitoring in Common Reed Wetlands J. Rollino

Comparison of Condition of Young of the Year Bluefish from two Different New Jersey Estuaries: Hackensack River and Great Bay, Tuckerton J. Samson

Avian Response to Marsh Restoration in the Meadowlands: the Value of Having Pre and Post Restoration Data A. Siegel

Eight Day Swamp: Assessment of Heavy Metal Concentration P. Weis, J. Weis, K. Barrett

Nekton Use of Different Marsh Grass Species C. Woolcott, J. Weis

Spectral Characteristics of Inter-Tidal Mud Flats in Impoundments at Low and High Tide N. Yao, F. Artigas

## Symposium Sponsors

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- Atlantic Estuarine Research Society
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- Ducks Unlimited
- Hackensack Riverkeeper
- Hudson River Environmental Society
- National Oceanic and Atmospheric Administration (NOAA)
- Natural Resources Defense Council
- NJ Audubon Society
- NJ Department of Environmental Protection
- NJ Water Resources Research Institute
- NY/NJ Baykeeper
- Olentangy Wetland Research Park at The Ohio State University
- Sierra Club, NJ Chapter
- Society of Environmental Toxicology & Chemistry, Hudson-Delaware Chapter
- Society of Wetland Scientists, Mid-Atlantic Chapter
- US Environmental Protection Agency
- Watershed Management Area 5

## Meadowlands Symposium Registration

You may register online at <http://cimic.rutgers.edu/meri/symposium>

We are also enclosing a registration form with this flyer that can be faxed to 201-460-2804 or filled out and mailed with your payment to Ms. Josephine Nash, Meadowlands Environmental Research Institute, 1 DeKorte Park Plaza, Lyndhurst, New Jersey 07071.

Registration is \$65 (\$20 for students) and is not complete until payment or a purchase order is received. Make checks/POs payable to the New Jersey Meadowlands Commission. The Commission must receive your registration payment by October 1 to accommodate the number of persons attending. Day-of-event registrants may not be able to participate in the field trip or to have lunches at the Commission. Note: private cars cannot be accommodated on the field trip because of access and parking restrictions.

### Directions to the Meadowlands Symposium online at

<http://www.meadowlands.state.nj.us/directions.html>

**New Jersey Meadowlands Commission  
1 DeKorte Park Plaza  
Lyndhurst, New Jersey 07071**

**NJ Turnpike Exit 16W** to Rt. 3 West; approx. 1 mi. to Route 17 South (Lyndhurst exit). Turn left at first traffic light onto Polito Ave. Go straight to end of Polito Ave.; turn left onto Valley Brook Ave. Follow this road approx. 1.5 miles to the NJMC complex. Park in the first lot you see and enter the first building, the Environment Center.

**Garden State Parkway or Rt. 21** to Rt. 3 East. Take Rt. 17 South/Polito Ave. exit; continue straight onto Polito Ave. Then follow directions above.

**Call 201-460-1700  
if you get lost.**

Anyone arriving by train or bus who would like to be picked up in Newark, Lyndhurst or Secaucus, please contact Ms. Josephine Nash, 201-460-3787, [jnash@meadowlands.state.nj.us](mailto:jnash@meadowlands.state.nj.us)



### Lodging

Quality Inn Meadowlands (provide airport shuttle service). Daily Rate \$89; Two days \$79  
10 Polito Avenue (Routes 3 & 17), Lyndhurst, NJ (2 miles from Symposium location)  
Phone 1-800-228-5151, web: [www.qualityinn.com](http://www.qualityinn.com)

Marriott Courtyard. One Day \$159; Two days \$109  
1 Polito Avenue, Lyndhurst, NJ, (2 miles from Symposium location)  
Phone 201-896-6666 web: <http://www.marriott.com/dpp/PropertyPage.asp?MarshaCode=EWRML>

Red Roof Inn. \$79/day  
15 Meadowlands Parkway, Secaucus, NJ (6 miles from Symposium)  
201-935-2386, web: [http://www.redroof.com/reservations/inn\\_details.asp?innNumber=150](http://www.redroof.com/reservations/inn_details.asp?innNumber=150)

# Meadowlands Symposium Registration Form

**Registration  
By Mail**

**Registration  
By Fax**

**Registration  
By e-mail**

**Registration  
Online**

Registration and payment should be mailed to  
Ms. Josephine Nash  
Meadowlands Environmental Research Institute  
1 DeKorte Park Plaza  
Lyndhurst, New Jersey 07071

You may also register by fax to 201-460-2804  
(use enclosed form)

Registration by e-mail at  
[jnash@meadowlands.state.nj.us](mailto:jnash@meadowlands.state.nj.us)

Registration online  
<http://cimic.rutgers.edu/meri/symposium>

**Guaranteed Registration Deadline is  
October 1, 2003**

Registration is not complete until payment or a purchase order is received. The fee is \$65 Regular or \$20 Student. Make checks/POs payable to the New Jersey Meadowlands Commission. You must pre-register to be guaranteed meals and a spot on the tours. Deadline for receipt of payment: October 1, 2003. Day-of-event registrants might be denied meals and/or tours because of inadequate space. Note that private cars cannot be accommodated on the field trip because of access and parking restrictions.

## Please Type or Print

Name (First M. Last):

Name for Name Tag:

Affiliation:

Title:

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State:

Zip:

Phone:

Fax:

e-mail

Please check the appropriate item:

☐ \$65 Regular

☐ \$20 Student

For planning purposes, please select one:

☐ Boat trip ☐ Wetland restoration site tour

or ☐ Will not be going on either field trip